

## CLAIMS

- 1           1.    A method of completing a well, comprising:  
2                    running in a tubular string into a cased borehole;  
3                    expanding a portion of said tubular into supporting contact with  
4   the casing;  
5                    delivering a sealing material through at least one opening in said  
6   tubular, with said tubular so supported;  
7                    closing off said opening.
  
- 1           2.    The method of claim 1, further comprising:  
2                    expanding said tubular to accomplish said closing after said  
3   delivering of said sealing material.
  
- 1           3.    The method of claim 2, further comprising:  
2                    using said expanding to close off said opening to accomplish a  
3   seal between said tubular and said casing.
  
- 1           4.    The method of claim 3, further comprising:  
2                    providing a seal downhole of said opening as a backup seal to  
3   any seal formed by said expanding.
  
- 1           5.    The method of claim 1, further comprising:  
2                    pushing said opening against the casing to close it.

1           6.     The method of claim 2, further comprising:  
2                 accomplishing said running in, supporting, delivering a sealing  
3     material, and closing of said opening by expansion, all in a single trip into the  
4     well.

1           7.     A method of completing a well, comprising:  
2                 running a tubular string into a cased borehole;  
3                 expanding portions of said tubular string into contact with the  
4     casing for support thereof;  
5                 leaving gaps between said tubular string and said casing, with  
6     said tubular string supported to said casing;  
7                 using said gaps for passage of a sealing material;  
8                 closing said gaps.

1           8.     The method of claim 7, further comprising:  
2                 providing longitudinal contact between said tubular string and  
3     said cased borehole;  
4                 defining said gaps as passages between said longitudinal con-  
5     tacts between said tubular string and said cased wellbore.

1           9.     The method of claim 8, further comprising:  
2                 using a fluted expansion swage to create said longitudinal contact  
3     for support of said tubular string;  
4                 providing offset flutes on said swage, located one above another;  
5                 using lowermost flutes to create said longitudinal contact;

6                    using offset flutes to subsequently remove said gaps after pas-  
7                    sage of said sealing material.

1                    10.    The method of claim 9, further comprising:  
2                    offsetting said offset flutes about 90° from said lowermost flutes.

1                    11.    The method of claim 7, further comprising:  
2                    accomplishing said running in, expanding, leaving gaps, passage  
3                    of said sealing material, and closing said gaps in a single trip into the well-  
4                    bore.

1                    12.    The method of claim 7, further comprising:  
2                    providing a seal between said tubular string and said cased  
3                    borehole by said closing of said gaps.

1                    13.    The method of claim 1, further comprising:  
2                    using full circumferential contact for said supporting contact.

1                    14.    The method of claim 13, further comprising:  
2                    providing a valve with said opening;  
3                    operating said valve to close off said opening.

1                    15.    The method of claim 14, further comprising:  
2                    providing a sliding sleeve on said tubular string as said valve.

- 1           16. A method of completing a well, comprising:  
2           running in a tubular string into a cased borehole;  
3           inserting at least one gripping member between said tubular  
4 string and said cased borehole to support said tubular string;  
5           leaving a gap adjacent said gripping member;  
6           flowing a sealing material through said gap;  
7           sealing said gap.
- 1           17. The method of claim 16, further comprising:  
2           expanding said tubular string uphole of said gripping member as  
3 said sealing said gap.
- 1           18. The method of claim 17, further comprising:  
2           providing a plurality of locking elements to support said tubular  
3 string;  
4           wedging said elements in a spaced relation to each other to  
5 create longitudinal gaps between said tubular string and said cased borehole  
6 for flow of said sealing material.
- 1           19. The method of claim 18, further comprising:  
2           wedging said elements below the top end of said tubular string;  
3           expanding said tubular string between said top end and said  
4 elements into sealing contact with said cased borehole.

1           20.   The method of claim 16, further comprising:  
2                   accomplishing said running in, inserting the gripping member,  
3   leaving a gap, flowing the sealing material, and sealing said gap in a single  
4   trip in the well.

1           21.   The method of claim 7, further comprising:  
2                   running in with a swage inside said tubular string;  
3                   supporting said tubular string while moving said swage uphole to  
4   expand portions of said tubular string into contact with said cased borehole for  
5   support thereof.

1           22.   The method of claim 21, further comprising:  
2                   locating a force transfer member inside said tubular string during  
3   run-in;  
4                   transferring an expansion force from said swage through said  
5   force transfer member to said tubular string for said expansion into said cased  
6   borehole for support thereof.

1           23.   The method of claim 22, further comprising:  
2                   configuring said swage to force said gaps closed through a force  
3   transfer through a sleeve which serves as said force transfer member.

1           24.   The method of claim 9, further comprising:  
2                   running in with a swage inside said tubular string;

3 supporting said tubular string while moving said swage uphole to  
4 expand portions of said tubular string into contact with said cased borehole for  
5 support thereof.

1 25. The method of claim 24, further comprising:  
2 locating a force transfer member inside said tubular string during  
3 run-in;  
4 transferring an expansion force from said swage through said  
5 force transfer member to said tubular string for said expansion into said cased  
6 borehole for support thereof.

1 26. The method of claim 25, further comprising:  
2 configuring said swage to force said gaps closed through a force  
3 transfer through a sleeve which serves as said force transfer member.

1 27. The method of claim 7, further comprising:  
2 reducing the diameter of a part of a tubing string whose original  
3 dimension, on said part thereof, was at least as large as the inside diameter  
4 of a cased wellbore, to an outer dimension small enough to fit into said cased  
5 borehole.

1 28. The method of claim 27, further comprising:  
2 expanding said portion of said tubing string to its said original  
3 dimension to close said gaps;

4                    providing said original dimension as larger than the inside dimen-  
5    sion of said cased wellbore;  
6                    sealing between said tubing string and said cased wellbore by  
7    forcing said portion of said tubular string into circumferential contact with said  
8    cased wellbore.

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